

Pre-Vocational Readiness with Emphasis on Oral Language Skills in People with Intellectual Developmental Disabilities

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Abstract

The aim of this study is to investigate the levels of spoken language teaching in adults with intellectual developmental disabilities (IDD) in terms of functional adaptive behavior in the community. In addition, learning and prevocational readiness with emphasis on relation to the rationalization of their needs at community bases. The methodology utilized the observation adapting in the persons with mental disabilities with records. The Informal Pedagogical Assessment (IPA) with basic control checklists (BCCL) has record in spoken language and prevocational readiness, according to the philosophy of the Greek Curriculum and the Framework Curriculum for Special Education (FCSE, 1995). Also, it used the study of bibliographic texts and the teaching data from six cases studies with mental and intellectual developmental disabilities, five women aged 26-30 and one 45-year-old man. The survey was conducted at the Physical and Medical Rehabilitation Center, in Kalamata, Peloponnese, Greece, which it is shortly called (KEFIAP) in the Greek language. The results recorded the positive responsiveness from their every week participation in the programs of KEFIAP. So, we underline two key themes which emerged regarding the teaching data: (a) the difficulties to the adaptive behavior was apparent due to the inability to understand linguistic concepts; and (b) the difficulties to understand rules formulated in linguistic terms for the social communication and integration. The implications of the observation methodology of special education and training (SET) to oral teaching intervention were useful for the teaching of learning and pre-vocational readiness skills and applied in accordance with the intellectual developmental disabilities.

Keywords: learning readiness, pre-vocational readiness, teaching speech/oral skills, intellectual developmental disabilities (IDD).

1. Introduction

The 2006 United Nations Convention on the Rights of Persons with Disabilities identified the need for people with disabilities to live and participate actively in the community (Aceves, 2016). This convention was the first international agreement on addressing disability rights worldwide and internationally.

This study investigates the levels of verbal discourse and pre-vocational readiness of young people, graduates of the Special Vocational Education (SVE), through the teaching of prevocational readiness of language skills, at the Physical and Medical Rehabilitation Center, in the

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Greek language is shortly called (KEFLAP) of Kalamata. The survey is carried out by using the participatory observation method of people who are by the side and educating people with disabilities. Observations were recorded in excel tables as hetero-observation with basic control checklists (BCCL) in spoken language and pre-vocational readiness.

2. Clarification of terms

According to the latest publication of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) of the American Psychiatric Association (2013) and the International Organization for the Study of Intellectual Development (IASSIDD) as indicated in the (IASSIDD, 2018) intellectual developmental disability (IDD) is defined as a lifelong disability occurring during or after development and is characterized by deficits in the general mental and adaptive behavior of the individual. The term Intellectual developmental disabilities refers to cases that are part of neurodevelopmental disorders such as mental disability, autism, motor disabilities, provocative behavior and mental health, as well as Down syndrome and other genetic syndromes. Furthermore, neurodevelopmental disorder is a diagnostic group in the new version of the International Classification of Diseases (ICD-11) that includes the “ behavioral and cognitive disorders that arise during the developmental period that involve significant difficulties in the acquisition and execution of specific intellectual, motor, or social functional” such described on World Health Organization (Zhou, Du, Salvador-Carulla & Glasgow, 2019). The symptomatology of these disorders is the dysfunction of cognitive, communicative and social functions. Students of formal and compulsory education with severe mental disabilities, as reported in the Lawson and Jones (2018) survey, have serious learning difficulties in acquiring knowledge. Often, they have additional aesthetic or physical disabilities and have difficulty communicating. This symptom is not limited to infancy, childhood and adolescence, but throughout adulthood. Thus, similar symptoms are noted in brain damage in the course of life, such as in cases of dementia, strokes and injuries. In addition, the life expectancy of people with intellectual and developmental disabilities (Hassiotis, 2018) has changed and been recorded.

A feature of people with Intellectual developmental disabilities (IDD) is the lack of adaptive functioning that results in the failure to respect development and socio-cultural standards for personal independence and social responsibility. Without their continued support, their functional adaptability will be limited to one or more day-to-day activities such as communication, social participation and independent living in multiple environments such as home, school, work and the community (American Psychiatric Association, 2013). Adults with IDD are a heterogeneous group of patients and have health conditions and factors affecting their health that can vary in kind, manifestation, severity or complexity from those of others in the community. They require approaches to care and interventions that are adapted to their needs (Canadian Family Physician, 2018)

The teaching of linguistic skills to improve this adaptive skills is fundamental for the communication and socialization of the individual with others (Christakis, 2006). Any form of communication results in a person's smooth psychological development and social adaptation to the environment. Through speech, the person develops interpersonal relations, expresses feelings, cooperates with others by observing rules, finally joins his peers, family, school and the wider society smoothly (Ministry of Education-Pedagogical Institute, 2009).

Pre-vocational readiness as a key axis of the Greek Curriculum and the Framework Curriculum for Special Education (FCSE) supports People with Special Educational Needs to the Special Vocational Education and Training Laboratories in the Greek language can be found with the acronym EEEK. These Special Vocational schools have focused the interventions to organize their personality, to recover their potential and weaknesses, to develop pre-vocational skills and to orientate themselves professionally (Drossinou-Korea, 2009). Teaching professional skills

(Low 3699, 2008) according the Special Education and Training (SET) begins at the age of 10-12 to 15 and is completed at the age of 22 to 23 years, depending on the potential and the difficulties of adolescents and young persons with Special educational needs (SEN) and disabilities (SEN/Ds). At lower levels, professional skills are limited to elementary knowledge and skills that a young person with SET to obliged to have in order to be able to acquire professional skills and work. Such knowledge and skills are, for example, fine motor skills, the use of handicraft tools and the skill of working with others. These skills are cultivated in the context of general craftsmanship or other courses. As age and education progress, the teaching requirements increasing gradually and the career guidance process gradually beginnings to take place (Christakis, 2013).

3. Historical report of learning relationship with professional activity

The first to attempt to combine a traditional method of education through work was Pestalozzi on a farm in Neuuhof. According to Soetard (2000), he attempted to educate poor beggars by working in fields with simultaneous training. The results, of course, were not encouraging. He dreamed, in accordance with the spirit of the Social Contract, a beautiful self-governing community, where the common interest would be totally identified, politically and Christian, with the individual interest. He understands that the desire (self-) in conflict with social law makes man capable of becoming, through and despite social mutilation, autonomous, with the sole purpose of educating.

Pestalozzi (Soetard, 2000), in spite of the adverse circumstances of the time, continued his efforts in developing his method by formulating a set of principles to which the pedagogue returned and which can produce techniques, but which mainly direct an action. These are the principle of supervision, the principle of elementary simplification, the principle of integration, the principle of activity, the principle of self-action. As a last principle, teacher training is formulated. Because, as he says, the educational process does not like a competition, thus, a solidarity agreement must be formed between children while participating in knowledge. A child who knows a few things, in fact knows only half of them, when he is faced with the task to help a classmate who is in need. Establishing this, a true "support" of a peer-to-peer form based on guidance from sub-masters, coming from more advanced classes, who assume the younger one.

In 2006, Christakis said that after appropriate training, adults with IDD can adapt to their environment, develop interpersonal relationships, form friendships, and engage in routine professions as unskilled or semi-skilled workers. In most cases, partial or full supervision and guidance will be required, depending on the degree of mental retardation they display (Christakis, 2006).

Some thematic units teach young people with disabilities, but also those with complex learning difficulties how to learn. They also learn to organize their personality, to realize their abilities and weaknesses and develop pre-vocational skills with content and teaching scenarios from the local labor market interests with which they are professionally linked and oriented. In particular, through the appropriate teaching activities, we try to get them to learn the tools and materials and how they are used. They learn how to protect themselves against the dangers and how to do the right work based on their subject matter. According to the Special Education proposals for children and young people with complex learning disabilities and disabilities and the pedagogical practices in the school, in the academic community and family is paid efforts' to learning the right behavior. So the efforts' are focusing the support of the good interpersonal relationships, good working habits but also appreciating the work they are doing, as well as their value (Drossinou-Korea, 2017: 809-875).

Reforms in SET (Burgess, 2017) give the opportunity to change culture of the local society. In order to build a strong economy, we must use the talents, skills and creativity of all,

including those with intellectual developmental disabilities. This also includes choosing the place where they live, having friends and participating in their local community and enjoying the challenges and benefits of paid protected.

The main means of expressing needs interacting with others is oral speech, which is the most important form of communication. Its development greatly influences human evolution as well as the results of the learning process. An IDD adult can be supported in the spoken area with targeted learning readiness activities that cultivate the ability to perceive and distinguish sounds. The distinction of acoustic stimuli is exercised by listening to oral narratives of everyday life and social stories. He gradually acquires oral skills in decoding audio information, successfully participating in the dialogue, waiting for his turn to express himself with clarity and precision. These activities can help many adults with IDD who have difficulties in phonological perception and distinction of sounds, in processing the phonological level of the language, in processing information, and understanding the meaning of a conversation or text.

Besides, the development of speech and language is closely related to cognitive function. Mental disabilities are characterized by difficulties not only in speech by language as well, so “adult” students with IDD face barriers in their academic duties, develop their vocabulary slower than their peers and their vocabulary is limited. However, the development of functional vocabulary is vital for the independent functioning of people with intellectual disabilities (Gargiulo & Bouck, 2017).

Vocabulary as part of the spoken or expressive language together with speech is one of the basic cognitive functions of human mind, because it allows the individual to manage communication roles and to communicate in everyday life. The vocabulary includes simple and complex elements of production, creation, enrichment and social dynamics, which are imprinted through the words and facilitate the social transaction in living and employment (Stasinou, 2015).

Functional vocabulary is identified with adaptive behavior in individual with IDD because they have significant difficulties in adapting to the social and physical environment and because they have not developed self-service skills, linguistic, sensory, social and professional skills satisfactorily. Functional vocabulary refers to the communicative skills of man conquered progressively unfolded in a dynamic communication field in the community. In other words, functional vocabulary and communication complement each other and are part or aspects of the communication spectrum of a man with IDD. The vocabulary is offered with thematic modules that exploit the experiences that affect adaptive skills. These are defined by self-help, self-care, family life, community, self-control, health and safety, use of community services, academic functions, free time and professional employment (Christakis, 2006).

4. Purpose of the survey

The purpose of this study is to identify language proficiency skills for people with intellectual and developmental disabilities (IDD). Basic skills testing focuses on learning readiness and speaking with language skills in some subject areas. The sample was taken by the local community of Messinia where people with IDD have attended formal schooling programs and are supported by creative linguistic activities at KEFIAP.

Research questions attempt to examine whether the teaching of language skills depends on the levels of spoken language. That is, what oral skills support the accessibility of people with IDD and communication in their day-to-day transactions with community bases?

Still, whether pre-vocational readiness levels are related to the vocalization of their needs within them has been investigated. More specifically, it has been studied with which

community bases they interact and what their levels of autonomous movement are. With the ultimate goal, community bases becoming future areas of employment.

5. Methodology

The methodology evolves into the interdisciplinary field of special education and training (SET) (Avramidis & Kalyva, 2006). It is based on the bibliographic study of the pedagogical principles without emphasizing their ages and disease classification as described in the philosophy of the Framework for the Curriculum for Special Education (FCSE) (Ministry of National Education and Religious Affairs – Pedagogical Institute, 2009). According to the “Differentiated pedagogical methodologies and applications” data was collected in accordance with the observation methodology of people with intellectual disabilities and the protocols mentioned in the Targeted Individual Structured and Integration Program for students with Special Education Needs (TISPIfSEN) (Drossinou-Korea, 2017: 299-301).

In the SET, individuals often have a multitude of intra-individual and differences with others. Even when they have the same form of disability, it is very difficult to have a homogeneous sample so that conclusions can easily be generalized without the risk of a superficial approach to over-simplify the cases. For this reason, according to “The conceptual delimitation of Targeted Individual Structured and Integrated Program for students with Special Educational needs” the first phase of the TISPIfSEN is defined as part of a continuing pedagogical research and refers to some case studies that surround the KEFIAP teams. Alongside the learning process, information, data and knowledge are gathered through pedagogic hetero-observation and ethics (Drossinou-Korea, 2017: 320-330). Where, compared with Avramidis and Kalyva (2006) in their book *Methods of Research in Special Needs Education. Theory and Applications*, they state that “a case study involves the detailed and intensive examination of a person or group as an entity, without being limited to how it is conducted” (p. 299).

The case study, with the systematic empirical observation according to the first phase of TISPIfSEN and the informal pedagogical evaluation with the heterogeneous assessments according to the second phase of TISPIfSEN, follows the thorough recording of data with the combined use of qualitative and quantitative data. This type of study is more often chosen in recent years as an appropriate model of research in the field of special education and lifelong learning (Avramidis & Kalyva, 2006).

The tools used in this study were systematic empirical observations focusing on the individual, family, and school history of each member of the group, utilizing the first phase of TISPIfSEN. Then, the Informal Pedagogical Assessment (IPA) research tool was used with the basic skills checklists (BSC) learning literacy levels (1), and Pre-Vocational Readiness (2), according to the second phase of TISPIfSEN.

The IPA of learning literacy levels (1) controls the attainment of linguistic skills by teaching vocabulary through listening. It tests the skills that are shown in the ability of an adult learner with IDD to listen, recognize, mimic and produce sounds or execute commands. In addition, linguistic skills are tested by engaging in dialogue that manifest themselves in their ability to name persons and objects, understand simple commands, recognize syllables, narrate the news of the day, and speak to their classmates. Finally, the skills to acquire language abilities are clearly expressed in the student's ability to say words and form sentences, to ask questions, to ask for information, to use verbs and adjectives correctly, to narrate, to describe and to express himself in front of others.

The IPA of pre-vocational readiness levels (2) controls the attainment of language skills by teaching vocabulary for the adult learner to know and use the tools and materials as well as protected himself against the dangers. Furthermore, skills of linguistic skills are tested through

practical skills such as gardening, cooking, crafts and sewing. In addition, the skills to attain language skills through behavior at work are reflected in the student's ability to know and recognize the value of work, to have good interpersonal relationships, to have appropriate working conditions and to appreciate the work he does. In addition, language skills are taught by teaching vocabulary for his vocational guidance. It controls skills in accessing the labor market, such as the ability of the adult learner to know the professions and his salary, and the ability to choose his occupation. Finally, skills in acquiring language abilities are monitored by observing working rules, such as the ability of adult learners to adhere to working conditions, to keep his job, to know social security and its importance, and to plan his leave of absence.

Finally, the research tools utilized group discussions with members of the group, based on the weekly thematic modules for studying the levels of spoken language in the teaching of pre-vocational language skills to people with IDD. The structure of the discussions was in the field of the non-structured interview in the focus group, according to Avramidis & Kalyva (2006). Because such interviews offer a great deal and in-depth information to groups of fewer than 10 people, matched by age, gender and nationality.

6. The focus group members of the study

According to the systematic empirical observation of the members of the group, in the first phase of the TISPIfSEN (Table 1) it is noted that of the 6 members of the group, there are 5 female aged 25-30 and one 45-year-old male. Based on their family history, all members live in a privately-owned home, half in an urban center, and the other half in a provincial area in the Peloponnese region. All members live with their parents and siblings. Table 1 shows the ages of their parents as well as the number of their siblings. It is then noticed that in two out of the six families, at least one member has a health problem, as shown in Table 1. The parents of all members work by showing their active working relationship.

Table 1. The 1st part of TISIPfSEN: Background

s/n adults students	Individual history			Family background						Diagnosis
	Sex	Age	Education	Father's age	Mother's age	Brother/sisters	House	Health	Parents work	
1 (Katerina)	F	30	Primary School	50	45	1	OWNED/TOWN	GOOD	Active (A)	Down
3 (Loukia)	F	27	SVE	60	52	4	OWNED/COUNTRY	Mother-Mental Disorders	(A)	I.D.
4 (Rena)	F	26	SVE	58	53	1	OWNED/TOWN	GOOD	(A)	Paraplegia
8 (Aiki)	F	20	High School	45	42	1	OWNED/TOWN	GOOD	(A)	I.D.

10 (Giota)	F	30	SVE	65	63	2	OWNED/COUNTRY	Intellectual Disabilities	(A)	I.D.
18 (Giannis)	M	46	Illiterate	75	60	1	OWNED/COUNTRY	GOOD	(A)	I.D.

According to school history, three females have attended the Special Primary School and then the Special Vocational Education (SVE) while the male is illiterate and has not attended any training structure. A woman completed her studies in compulsory formal education (3rd grade) and then attended homework until she reached the age of observing the teams at KEFIAP. Finally, a girl did not continue in any other education structure after attending the special primary school.

All members are diagnosed by official bodies, which are supervised by the Greek Ministry of Health and the Ministry of Education. A woman has a Down syndrome diagnosis, another multi-aging, and finally, the other mental retardation (Table 1).

Table 2. The calendar of micro-group meetings

Calendar of Micro-Group Meetings														
			oral language skills						pre - employment readiness					
A/A	DATE	Unite	Aliki	Giannis	Katerina	Rena	Loukia	Giota	Aliki	Giannis	Katerina	Rena	Loukia	Giota
1	2/10/2018	Contact	1	1	1	1	1	1	1	-1	1	1	1	1
2	9/10/2018	Family	1	1	(-)	1	1	(-)	1	-1	(-)	1	1	(-)
3	23/10/2018	The treepedigree	1	-1	1	1	1	1	1	-1	1	1	1	1
4	30/12/2018	The Epic of '40	1	1	1	1	1	1	1	0	1	1	1	1
5	6/11/2018	Means of transport	1	-1	1	(-)	1	1	1	-1	0	(-)	1	1
6	13-Noe	Means of transport	1	0	(-)	1	(-)	1	1	-1	(-)	1	(-)	1
7	20/11/2018	Means of transport	(-)	0	(-)	1	1	1	(-)	-1	(-)	1	1	1
8	27/11/2018	Community Station	1	-1	1	1	1	1	1	-1	1	1	1	1
9	4/12/2018	Community Station	1	0	1	1	1	1	1	-1	1	1	1	1
10	11/12/2018	Community Station	1	1	1	1	1	1	1	-1	1	1	1	1
11	18/12/2018	Visit to a Community Station	1	0	1	1	1	1	1	0	1	1	1	1

In order to measure the proficiency of the language skills in the spoken word of the group members, a double-entry table was created according to the micro-group meetings calendar. On the horizontal axis the thematic sections were placed and the names of the group members in the vertical axis. The number (1) was positive for participation in linguistic activities by (-1) non-participation, with a dash (-) absence of the member from the group (Table 2).

Correspondingly, the proficiency preparedness was recorded (Table 2).

7. Course and research constraints

The course of the survey lasted from 2/10/18 to 18/12/18. During this time, group discussions took place in some thematic units, such as “my family”, “my daily schedule”, “my home” and “my city”.

The limitations of the survey were that meetings with the members of the KEFIAP were held on a weekly basis for one hour. The data gathered resulted from the interaction of the members with the researcher-educator, the volunteers and the employees of KEFIAP.

For reasons of confidentiality, the actual names of the members of KEFIAP have been replaced with fictional.

8. Presentation of the results of the survey

In the results of the survey, following the collection of qualitative and quantitative data, it was found that spoken levels significantly affect the quality of community transactions as reflected in language skills pre-employment readiness. The vocabulary of people with intellectual and developmental disabilities (IDD) does not correspond to the expected levels of language skills expected on the basis of formal and compulsory education.

8.1 Levels of speaking in teaching language skills to adults in terms of functional adaptive behavior in the community

We used the observation method through language processing activities to produce the appropriate information regarding the cognitive level of the group and to record their difficulties. The observed behavior with the Informal Pedagogical Assessment was coded with the BSCs of learning readiness and functional language skills of spoken language.

Observations are recorded in excel tables, where language skills are marked on a horizontal axis, while the vertical axis distinguishes the levels of study in semesters from early intervention (1st semester of the nursery – 2nd semester of pre-school), formal compulsory education (1st semester to 2nd semester), formal secondary education (first semester of the second semester of the second semester of a senior high school) and non-graduate post-secondary education as well as lifelong informal special education and training.

Where speech is concerned, Katerina (Case Study (CS): 1) gathers the highest semester in participation in dialogue while in the activities of expression she clearly and accurately reaches the 18 semesters of study. Lucia (CS: 3) has a steady image deviating from her base line by 9 semesters in all areas except the area of expression with clarity and accuracy where it has a deviation of 15 semesters of study. Following, Rena (CS: 4) also notes a relative homogeneity with deviation from the baseline in 19 semesters of study at the level of listening and participating in dialogue while 18 semesters in the area of expression with clarity and accuracy. Alice (CS: 8) expresses a deviation less than her age by 9-semester in listening and recognizing sounds and naming objects. She marks 19 semesters of deviation in listening skills such as listening to and understanding words and phrases, announcing the news of the day and expressing it with precision and clarity in front of others. Yiota (CS: 10) in this particular IPA presents a parallel line from the baseline with a deviation of 8 semesters of study. Yannis (CS: 18) marks the lowest 15-semester deviation below the baseline in listening skills, while the highest in the field of expression is accurate and clear.

8.2 Levels of pre-employment readiness in relation to the verbalization of their needs at community base

The basic tool of the observation was also the recording of the IPA of pre-vocational readiness, with modules of pre-vocational skills and professional orientation. The module of pre-vocational skills examines the unity of practical skills tools and behavior at work. The labor market approach and labor standards are examined in the vocational guidance module.

In the IPA of pre-vocational Katerina (CS: 1) shows a high deviation in practical skills for the pre-occupational field, where it is noticed that being taught how to be kept safe from danger is a priority s. Lucia (CS: 3) has a steady image in all areas, defining her in the 20th semester of formal and compulsory education with a 9-month deviation. With the exception of practical skills where she is ranked in the 16th semester of study with a deviation of 13 semesters.

Consequently, Rena (CS: 4) has a steady variation in the IPA of pre-occupational readiness, with a higher deviation of 15 semesters and a lower of 17 semesters from the base line.

Alice (CS: 8) marks a 13-month deviation from the baseline and a lower 15-semester deviation in the areas of practical skills and access to the labor market. Yiota (CS: 10) in this particular IPA also presents a parallel line to the base line with a deviation of 9 semesters of study and setting as a teaching priority to be protected against dangerous. Finally, Giannis (CS: 18) shows the highest deviation in 15-semester tools below the baseline and the lowest deviation in practical skills and work behavior with 24 semesters below.

Finally, by measuring the proficiency of language skills (Table 2), the assumptions of our study confirm that the levels of oral speaking and pre-vocational readiness do not correspond to the expected levels based on their formal and compulsory general and special education and training. However, they are able to respond positively to their communication with community base in their area with pedagogical guidance and targeted support, mainly using transportation or even going somewhere on foot.

More specifically, all the members on the days they were present had a positive response to all the activities at KEFIAP, except for Giannis, who in every change of thematic unit was wrong in the activities and sometimes refused to participate. While in activities aimed at pre-vocational preparedness he was unable to give a positive answer.

9. Conclusions

Through the findings of our research we come to the conclusion that people with IDD interact with individuals with the local community and community bases. However, adults with IDD are found to have little to do with community bases in their area. The reasons may be due to the lack of knowledge and skills, to the existence or lack of personal support and service managers, to the geographical location of their home, and to community factors such as lack of amenities and attitudes (Abbott & Mcconkey, 2006).

It is noted that despite the completion of formal compulsory education by some pupils, their levels of language skills do not correspond to their age bracket. Therefore, it becomes necessary to develop language skills of pre-vocational readiness in post-secondary and lifelong structures of special education and training. In recent years, with changes in policy and parental advocacy, it has become more feasible to select IDD adults to attend a post-secondary education structure, including informal and lifelong SEN/D. By studying the students with IDD in such a structure that promotes pre-vocational readiness and professional orientation they become prepared for a certain form of employment. Post-secondary education with support services takes care of adult students with IDD in order to achieve academic progress, expand their social skills, and become active and notable members of their community (Petcu, Petcu, Chezan & Lee van Horn, 2015).

In the case of the Southern Peloponnese, attendance of adults with IDD at KEFIAP is the only way towards linguistic and creative employment. A typical example is that of Alice, who completes her general high school in her area, stayed at home until she was of the appropriate age to watch the KEFIAP small groups.

Finally, the application of the thematic units that promote the autonomous and functional behavior of adults with IDD using the pedagogical tool TISIPfSEN supports the level of pre-vocational language skills of adults with IDD.

In conclusion, it is advisable to further investigate IDD adults with regard to their levels of language skills. In order to promote autonomous or semi-autonomous functional behavioral skills in their local community as well as to the level of language skills for their pre-vocational readiness.

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